

CALL FOR PAPERS

IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing

Special issue on
**“GeoVision: Computer Vision for
Geospatial Applications”**

Earth Observation is an ever-growing field of investigation where computer vision, machine learning, and signal/image processing meet. The general objective is to provide large-scale, homogeneous information about processes occurring at the surface of the Earth exploiting data collected by airborne and space-borne sensors. These sensors provide rich information on materials and biophysical surface properties over a large part of the electromagnetic spectrum as well as varying spatial, temporal, and spectral resolutions. Earth Observation thus implies the need for multiple inference tasks, ranging from detection to registration, data mining, multi-sensor, multiresolution, multi-temporal, and multimodality fusion, and regression, to name just a few. It comprises ample applications such as location-based services, online mapping services, large-scale surveillance, 3D urban modelling, navigation systems, natural hazard forecast and response, climate change monitoring, virtual habitat modelling, etc. With this special issue we aim at fostering collaboration between computer vision and Earth Observation communities and invite contributions dealing with:

- Multi-modal, multi-temporal, and multi-scale data analysis
- 3D object recognition and classification
- Dynamic scene understanding
- Domain adaptation and concept drift
- Semantic labelling, structured prediction, and structured learning in remote sensing
- Interactive, human-in-the-loop interpretation of remote sensing data
- Large-scale 3D reconstruction of urban scenes from very high-resolution data
- Applications to urban areas, vegetation mapping, tourism, oceanography

The special issue follows the two CVPR workshops “IEEE/ISPRS EarthVision Workshop 2015” (<http://www.grss-ieee.org/earthvision2015/>) and “IEEE/ISPRS 2nd Joint Workshop on Multi-Sensor Fusion for Dynamic Scene Understanding” (MSF 2015, <http://www.sfpt.fr/msf15/index.html>). Note that submission is **not** restricted to EarthVision or MSF contributors and attendees. The papers will be judged only by their quality.

Format and preliminary schedule

All submissions will be peer reviewed according to the IEEE Geoscience and Remote Sensing Society guidelines. Submitted articles should not have been published or be under review elsewhere. Submit your manuscript on <http://mc.manuscriptcentral.com/jstars> using the Manuscript Central interface and select the “GeoVision” special issue manuscript type. Prospective authors should consult the site <http://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=4609443> for guidelines and information on paper submission. Please note that IEEE JSTARS applies a mandatory page over length charge of \$200 per page (beginning with page 7 and beyond).

Schedule

September 30, 2015 Full paper submission deadline

November 1, 2016 Expected publication date

Guest editors

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